

# Work Order ID 66861

Tuesday, March 01, 2011 8:05:59 AM



Page 1

Item ID: D3211-1

Accept



Setup Start



Revision ID:

Item Name: Bracket

Stop



Start Date: 3/1/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 3/7/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals:

Process Plan:

*H*

Date: *1-03-11*

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D3211

Rev A1 / DEO

100

0.00



FLOW WATER JET

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D3211

☐ Dwg Rev: *A1*

☐ Prog Rev: *A1*

☐ 2-

Deburr if necessary

*2024.063*

*B 11-3-10*

*(12)*

110

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

*B 11-3-10*

120

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

*ml*

*11*

*03.10*

*(12)*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 66861**

Tuesday, March 01, 2011 8:05:59 AM



Page 2

Item ID: D3211-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 3/1/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 3/7/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

130



Small Fab

0.00

Small Fab

Memo

0.00

Small Fab

Debur

NA

140



NC BRAKE

0.00

Brake NC

Memo

0.00

Brake NC

Bend D3211-1 Stack as per Dwg D3211

SB 11/03/14



PTO

150



QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

0.00

Quality Control

SB 11/03/14



W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: D3211-1 PAR #: \_\_\_\_\_ Fault Category: Small Fwls NCR: ☒ Yes No DQA: [Signature] Date: 11/03/16  
 Resolution: Scrap Disposition: Scrap QA: N/C Closed: [Signature] Date: 11/03/17

NCR: <u>66821</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
11/03/14	140	1 part first side bend was out of tolerance R.C process	<u>[Signature]</u> 11.03.14 05/04/14	Scrap & destroy No replace Qty 1	S/S 11/03/14	<u>[Signature]</u> 11/03/14	<u>[Signature]</u> 11.03.14 05/04/14	<u>[Signature]</u> 11/03/14

NOTE: Date & initial all entries

# Work Order ID 66861

Tuesday, March 01, 2011 8:05:59 AM



Page 3

Item ID: D3211-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket

Start Date: 3/1/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 3/7/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1  Memo	0.00  0.00				12	0	11/03/14	
170  Powdercoat Powder Coating	Black Sandtex(Ref:4.3.5.7) per QSI005 4.3  Memo START TIME: 11:45 *OVEN TEMPERATURE: 200° FINISH TIME: 12:15	0.00  0.00				12	0	11-3-15	
180  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00  0.00				12	0	11/03/15	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 66861**

Tuesday, March 01, 2011 8:05:59 AM

Page 4

Item ID: D3211-1

Accept

Revision ID:

Item Name: Bracket

Start Date: 3/1/2011 Start Qty: 12.00

Required Date: 3/7/2011 Req'd Qty: 12.00

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Run Start

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

Identify as per dwg & Stock Location: 211

0.00



Packaging

Memo

0.00

Packaging

11/3/15 1200

200

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/3/16 1200MF  
11-03-15

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Picklist Print

Tuesday, March 01, 2011 8:06:04 AM

Page 1

Work Order ID: 66861

Parent Item: D3211-1

Parent Item Name: Bracket



Start Date: 3/1/2011

Required Date: 3/7/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: IPP Rev:A New Issue 05-11-17 JLM  
IPP Rev:B Now on Waterjet 06-10-24 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M2024T3S.063

Purchased

No

100

sf

149.1270

1.405

17.74737



KB11-3-10

2024-T3 .063 sheet

Location

Loc Qty

Loc Code

MAT

144

117018

144

MAT22

5.127

113867

0.7

114351

4.427

117018

12

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**DART**

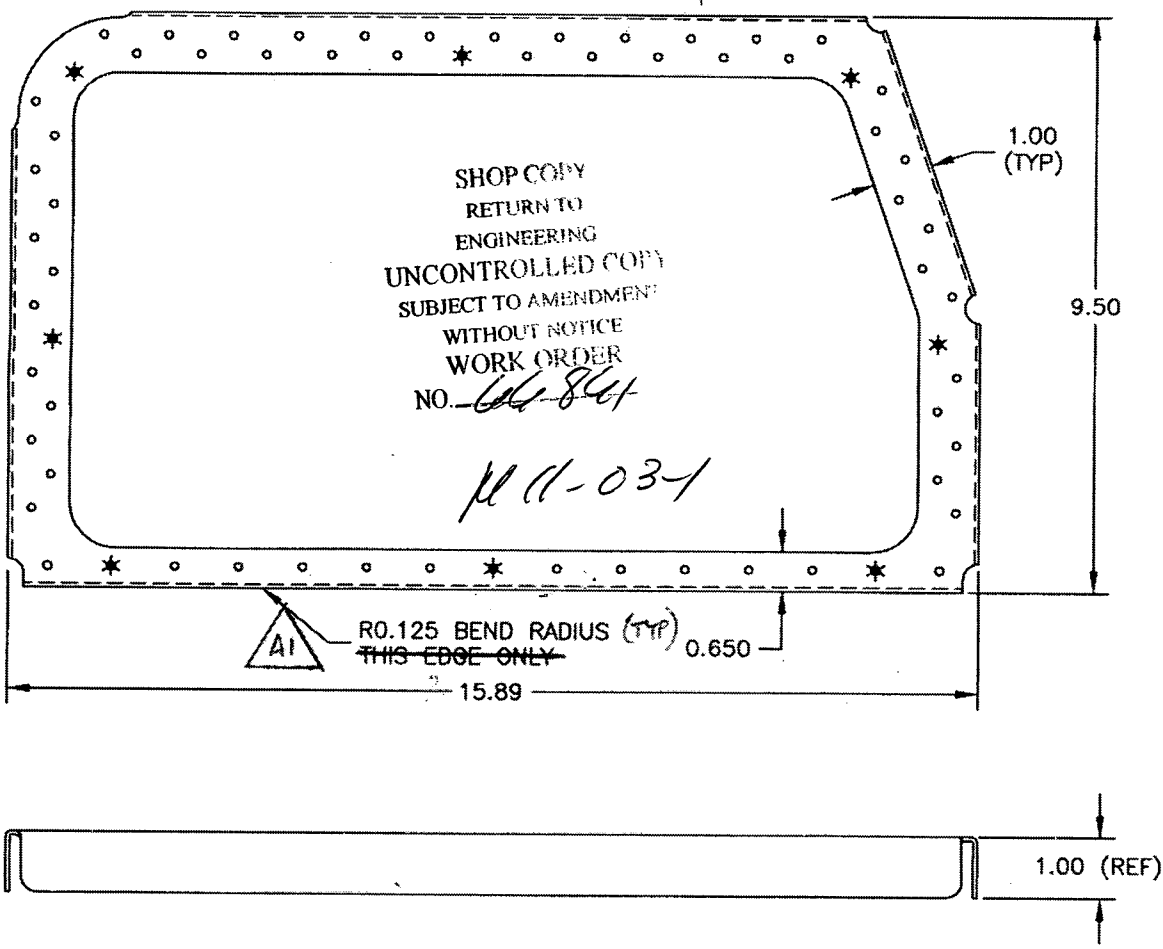


RELEASED  
03.09.15

DEO ATTACHED

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		
10	CP	DRAWING NO.	REV. A	
CHECKED	APPROVED	D3211	SHEET 1 OF 2	
DATE		TITLE	SCALE	
03.09.03		BRACKET	1:3	
A	03.09.03	NEW ISSUE		
A1	03.12.05	CHANGE ALL BEND RADII TO R0.125		

D3211-1 BRACKET  
MACHINE PER DRAWING FILE "D3211-A2.DWG"  
CHECK PER TEMPLATE D3211-1T1  
MATERIAL: 2024-T3 (QQ-A-250/4) SHEET 0.063 THICK  
FINISH: ACID ETCH AND ALODINE PER DART QSI 005 4.1  
POWDER COAT BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3  
USE MINIMUM BEND RADIUS OF ~~0.188"~~ 0.125" EXCEPT WHERE INDICATED  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Copyright © 2003 by DART AEROSPACE LTD

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

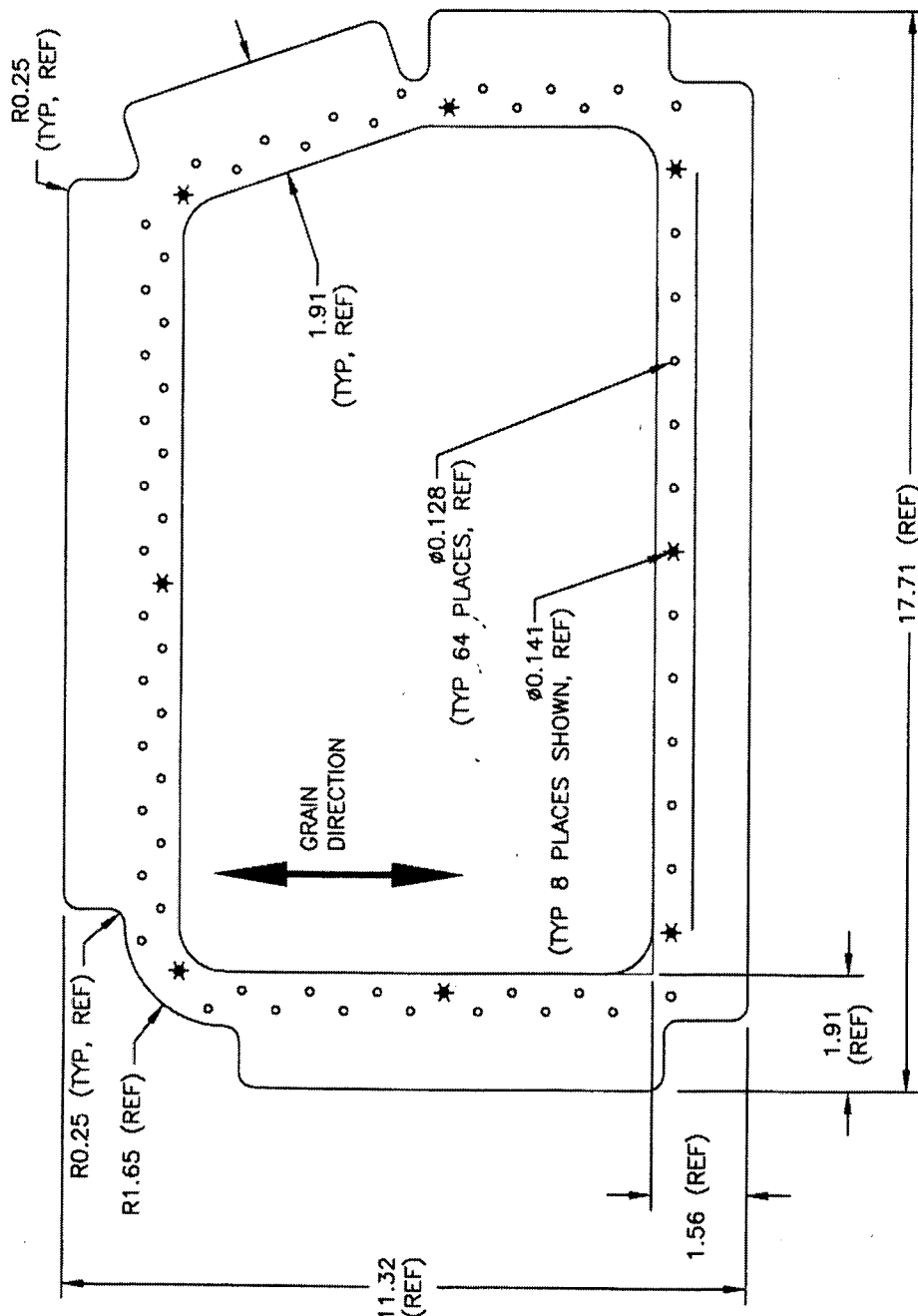


DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3211	REV. A SHEET 2 OF 2
DATE 03.09.03		TITLE BRACKET	SCALE 1:3

RELEASED  
03.09.15

DEO ATTACHED

D3211-1 FLAT PATTERN



*u/b 6684*

Copyright © 2003 by DART AEROSPACE LTD

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

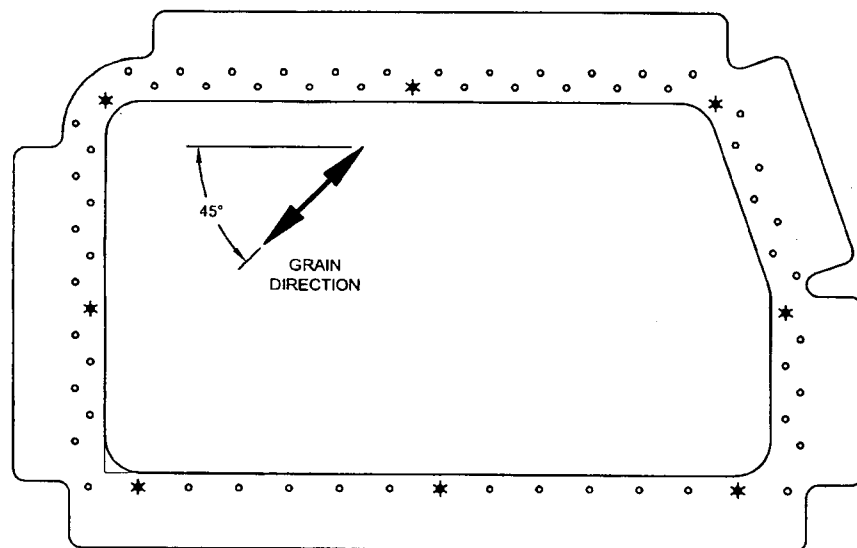
**NOTE:** Date & initial all entries



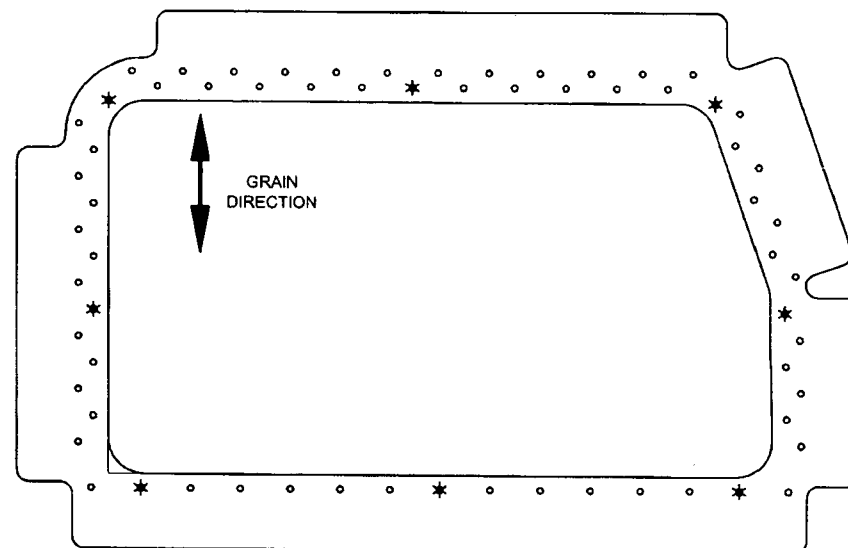
DRAWING NO. D3211	TITLE BRACKET	REV. A	DART AEROSPACE LTD ENGINEERING ORDER		D.E.O. NO. D3211-A-2	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN AJS	CHECKED <i>[Signature]</i>	MFG. APPR. <i>[Signature]</i>	APPROVED <i>[Signature]</i>		DE APPR. <i>[Signature]</i>		
DATE 08.09.12	DATE 08.09.12	DATE 08.09.12	DATE 08.09.12		DATE 08.09.12		

SHEET 2 MODIFY GRAIN DIRECTION AS SHOWN BELOW TO FACILITATE BENDING (SEE CAR 08-001).

IS:



WAS:



ALL OTHER INFORMATION REMAINS UNCHANGED

**RELEASED**  
08.09.12

u/o 66841

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries